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MILITARY OCEAN TERMINAL, BAYONNE  
OPERABLE UNIT 2 - LIGHT RAIL PARCEL  
DECISION DOCUMENT

# MILITARY OCEAN TERMINAL, BAYONNE OPERABLE UNIT 2 - LIGHT RAIL PARCEL DECISION DOCUMENT JUNE 1999

## 1. Purpose

This Decision Document was developed by Military Ocean Terminal Bayonne, New Jersey (MOTBY) through the Base Realignment and Closure Act Cleanup Team (BCT) which includes MOTBY, New Jersey Department of Environmental Protection (NJDEP), and the United States Environmental Protection Agency (USEPA, Region II) as members. This document describes the rationale and justification for the Removal Action (RA) at the polychlorinated biphenyl (PCB) transformer site and the "No Further Action" for other areas of the site at Operable Unit 2, the Light Rail Parcel (LRP). This document also addresses the remedial actions to be performed by the Bayonne Local Redevelopment Authority, hereinafter referred to as the transferee.

This Decision Document complies with the substantive provisions contained in the NJDEP regulations N.J.A.C. 7:26F, "Technical Requirements for Site Remediation" (NJDEP 1997), the Comprehensive Environmental Response, Compensation and Liability Act, as amended by Superfund Amendments and Reauthorization Act, the National Contingency Plan, the Resource Conservation and Recovery Act, and Army Regulation (AR) 200-1 (U.S. Army, 1997), as applicable.

It should be noted that MOTBY is not a National Priorities List (NPL) site.

## 2. Background

As a result of a recommendation by the Defense Department's BRAC Commission in 1995, MOTBY is to terminate all military operations at the facility. Following this mandate, the City of Bayonne initiated a Reuse Commission, which established a Local Redevelopment Authority, the transferee. The transferee has approved the LRP for reuse as a Light Rail Stop, under a sublease to the New Jersey Transit Authority.

The LRP is located in the southwest extreme corner of the MOTBY peninsula. The 14.2-acre study area is bordered to the north by the Goldsborough Village housing development, to the south by New York Harbor, to the east by the railroad classification yard, and to the west by NJ Route 169. Significant features within the LRP include: the Stevedores' Trailer (84A) and parking lot, the Arts and Crafts Center (228A), the Visitors' Center (228B), the Bus Waiting Shelter (228C), the Sentry Booth (228D), the Administration Building (228E), the Facility Sign (228F), the Child Development Center (229I), the Youth Activity Center (229J), and the Main Gate (see Figure 1).

In January 1997, the U.S. Army Environmental Center (USAEC) completed an Environmental Baseline Survey (EBS) (Ecology & Environment, 1997), which identified areas of concern on

the LRP. The EBS resulted in the LRP being rated a '7' as defined in the Community Environmental Response Facilitation Act (CERFA) as a result of these concerns. A '7' CERFA rating denotes an area that is unevaluated or that requires additional evaluation.

The EBS identified the following issues that needed to be addressed prior to transfer of the property:

- three former underground storage tanks (USTs),
- potential migration of petroleum contamination on site from off-site sources along Route 169,
- potential discharges from a sanitary sewer,
- potential spills from former transformers containing polychlorinated biphenyl (PCBs), and
- site-wide issues relating to historic fill and groundwater quality.

These concerns were investigated under three separate actions: one performed by New Jersey Transit (BEM, 1996 a,b) as part of their ongoing planning to use the LRP, and two performed by NJOTBY (Ecology & Environment, 1997 1998).

### 3. Determination of Acceptable Limits

The NJDEP does not require site specific risks to be calculated or evaluated unless requested by the responsible party. However, New Jersey has requirements to delineate all contamination to residential standards. For purposes of evaluating the LRP, contaminant levels found were compared to NJDEP residential direct contact soil cleanup criteria (RDCSCC) (NJDEP 1996) and New Jersey Groundwater Quality Criteria (NJGWQC) (NJDEP 1995). The New Jersey soil clean-up criteria levels are not promulgated, however, under NJDEP regulations N.J.A.C. 7:26E, "Technical Requirements for Site Remediation", a Case Manager may set clean-up criteria on a case by case basis.

### 4. Summary of Investigations Performed

The following text summarizes information gathered from three previous investigations performed at the LRP.

**Three Former UST's.** The LRP former UST's, UT-228A-1, UT-229J-1 and UT-229H-2, all contained No. 2 Fuel Oil. The total recoverable petroleum hydrocarbons (TRPH) soils analyses reported a 12,000 ppm concentration from a depth of 2 to 4 feet at UT-228A-1. (Ecology & Environment, 1997) The NJDEP health-based criterion for total organic contaminants of 10,000 ppm is exceeded (NJDEP, 1996, footnote c).

**Contaminated Groundwater Migration from Off-Site Source.** One well, MW02-28 (also known as MW028 and MW28), located at the western property boundary, near NJ Route 169, had hits of benzene, methylene chloride, and total xylene at 11 ug/L, 45 ug/L, and 7.6 ug/L, respectively. These concentrations exceeded their NJGWQCII-A limits of 1 ug/L, 2 ug/L, and 40

ug/L, respectively. Furthermore, a methylene chloride hit of 2.6 ug/L (J) was also recorded at MW1 (also known as MW001) near the Arts and Crafts Center (228A). These contaminants were reported during a facility-wide groundwater sampling round taken in October 1997, and were not present in the associated field blanks.

**Sanitary Sewer Discharges.** The investigations on the LRP did not identify that sewer discharges occurred.

**Former PCB Transformers.** A surface soil sample (S002) taken at a depth of 0 to 6 inches showed a PCB concentration of 6,550 parts per million (ppm) near the transformer identified in the EBS as PCB-228A-1 (Equipment Number 689227). This hot spot concentration is well above the TSCA recommended action level of 25 ppm, as well as the non-promulgated guidance levels contained in the NJ Residential and Non-Residential DCSCC (0.49 ppm and 2 ppm, respectively). The potential pathways for this study area include dermal contact and ingestion.

**Facility-Wide Historical Fill and Groundwater Quality.** Although a facility-wide investigation of historic fill indicated that samples collected from 14 of 15 borings did not have metals concentrations above NJDEP RDCSCC, for the LRP site, elevated metals were found in one surface soil sample taken under a study for specific OUs. Surface soil sample SS026 taken at a depth of 0 to 6 inches near the Visitor's Center (228B) contained copper (1,570 mg/kg) and nickel (664 mg/kg) in concentrations above NJ Residential DCSCC (600 and 250 mg/kg, respectively). Individual organic compounds in soil did not exceed NJ Residential DCSCC.

Metals concentrations in the groundwater within the LRP area are above NJGWQCII-A. The concentrations are attributed not to site-specific activities, but most probably to contact with the historic fill. The organic compounds benzene, methylene chloride, and total xylene, as noted above, exceeded the NJGWQCII-A.

## 5. Summary of Remedial Actions

**Three Former USTs.** The selected action for the UST areas and soils in general is to provide for a permanent cover over soils and/or reuse of soil contaminated above New Jersey Non-residential Direct Contact Soil Cleanup Criteria (NRDCSCC). This will be funded and completed as part of the development of this parcel by the transferee. The transferee (through a sublease to New Jersey Transit) plans to construct a park and ride facility at the LRP. This action will eliminate the direct contact pathway to soils contaminated with metals and petroleum products.

Alternatives evaluated for contaminated soil at the LRP by the New Jersey Transit in their Remedial Investigation/Remedial Alternatives Analysis (RI/RAA) included the no action, permanent cover/on-site reuse under impervious structures (i.e., building foundations or paved areas), soil reuse as daily cover at off-site landfill, off-site recycling, and off-site disposal. Permanent cover/soil reuse was selected as since it is protective of human health and the environment, was the most timely and cost effective remedy, and is consistent with NJDEP's guidance "*Guidance Document for the Remediation of Contaminated Soils*" (NJDEP, 1998). This evaluation was documented in New Jersey Transit's RAA dated March 14, 1996 (BEM 1996 b), and approved by NJDEP in May 1996. This alternative is also consistent with future

use of the LRP as a park and ride facility and minimizes the government's cost for ultimate disposal of this parcel. A soil reuse plan for the sublessee's work was previously approved by NJDEP (NJDEP approved NJ Transit's Soil Reuse Plan (BEM 1996 c) and will be followed during the development of this parcel.

In addition, it is anticipated that a Declaration of Environmental Restriction (DER) will be placed on the LRP parcel addressing the petroleum and metal contamination of the soil.

**Contaminated Groundwater Migration from Off-Site Source.** The LRP remedial investigation results (Ecology & Environment, 1997) showed volatile organic compounds (VOCs) migrating onto MOTBY, most likely from an off-site source. The LRP groundwater issue will be addressed in the DD for Operable Unit 5, Facility Wide Groundwater.

**Potential Sewer Discharges.** This issue was determined to require "No Further Action" after the investigations.

**Former PCB Transformers.** It is recommended that the PCB contamination be excavated and removed. The decision to remove and dispose of the PCB-contaminated soils was based on the following factors:

- The area of contamination is limited.
- There is a small volume of soil for actual removal (estimated at 56 cubic yards – actual removal volumes will be based on analysis conducted during the field work).
- The surface concentrations are extremely high (up to 6,550 parts per million). This level is 250 times the recommended action level under TSCA, and is over 3,000 times the guidance level in the non-promulgated soil clean up criteria for non-residential land use. The Army has determined that the presence of the PCBs in this limited area at these extremely high concentrations poses a threat to public health and a removal action is appropriate to abate the this release. 40 CFR 300.415
- The action will result in a relatively low cost given the limited nature of the removal action.

#### **LRP Groundwater Quality.**

As part of the site-wide remedy for groundwater, it is expected that a Classification Exception Area (CEA) will be placed on the entire MOTBY facility, including the LRP. The LRP groundwater issue will be addressed in the DD for Operable Unit 5, Facility Wide Groundwater.

Based on the above actions, the Community Environmental Response Facilitation Act (CERFA) category for this parcel would change from category 7 to category 4 which denotes an area of known contamination where all remedial action necessary to protect human health and the environment have been taken.

#### **6. Public/Community Involvement**

Department of Defense (DOD) and Department of Army (DA) policy requires that the local community be involved as early as possible and throughout the BRAC process at an installation. To accomplish this MOTBY has instituted a Restoration Advisory Board (RAB). Through regular RAB meetings, the residents have been informed of the fast-track nature of the LRP, the various environmental issues associated with the LRP, the results of the studies at the LRP, and the proposed remedies. This has been done by making project documents available for review and comment by the public as well as formal presentations at the RAB meetings. A summary of this document was published in the Jersey Journal, Bayonne Edition and copies of the draft document were made available for review at the Bayonne Public Library as well as the library at MOTBY. Comments were requested from the public via the notice published in the Jersey Journal. This Decision Document was also presented and made available for review and comment at a RAB meeting. Therefore, the community has been fully integrated into the decision making process on the LRP. Future community involvement will consist of reports on actions taken as well as continued updates on progress at RAB meetings.

## 7. References

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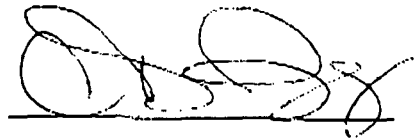
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#### 8. Declaration

The selected remedies are protective of human health and the environment, attain Federal and State requirements that are applicable or relevant and appropriate to this remedial action and are cost effective.

Approved By:



Colonel Charles D. Beck  
Military Ocean Terminal Bayonne  
Installation Commander